

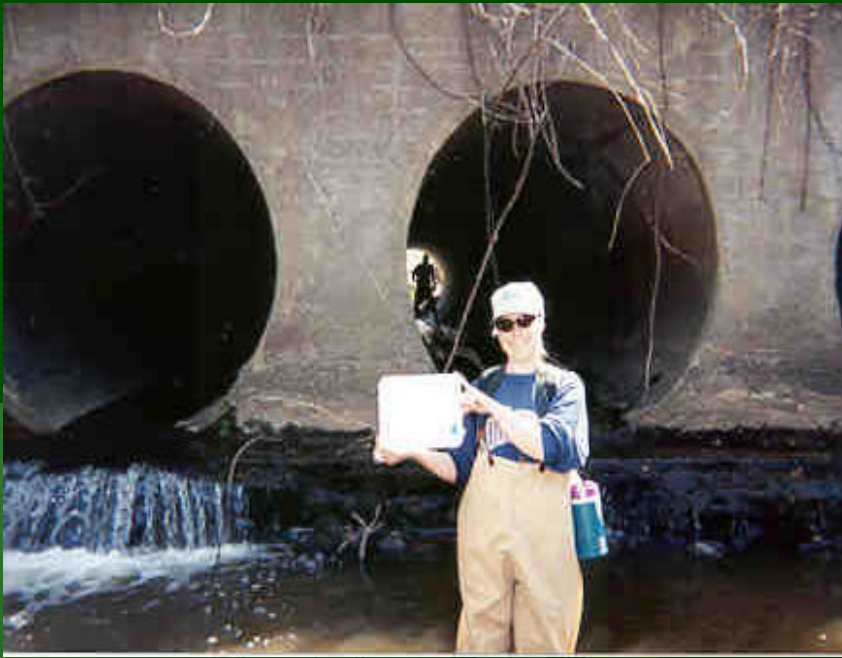
Everyone Can Contribute

DEQ Uses Of Data From Citizen Monitors
Private Industry And
Other Government Agencies

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July 21, 2007

Sources Of Non-agency Data



Stream Walk Visual Assessment

- Citizen Volunteer Groups
- Federal, non-DEQ State, and Local Government Agencies
- Private Industry
- Academia

Monitoring Programs That DEQ Partners With

- 95 citizen monitoring groups
 - 6 colleges and universities
 - 8 counties and other local governments
 - 7 State and Federal agencies
 - 11 Soil and Water Conservation Districts
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- For the 2006 305(b)/303(d) Integrated Water Quality Assessment Report, DEQ used data from 757 citizen monitoring sites and 544 non-agency sites

Common Types Of Water Quality Data Important To DEQ



Save Our Streams sampling

- Chemical
 - pH
 - Dissolved Oxygen
- Biological
 - Benthic Macroinvertebrates
 - E. coli
- Physical
 - Temperature
 - Salinity

Categories For Non-Agency Data

- Level III - approved by DEQ- (approved QAPP, and use DEQ approved methodologies)
 - Could be used for 303(d) List
- Level II- partially approved-(approved QAPP, use similar but not DEQ approved methods)
 - Could be used in establishing new DEQ sampling stations, for TMDL Implementation tracking, etc.
- Level I- not approved- (no DEQ approved QAPP or methodologies)
 - Use for education or to identify water quality problems for Pollution Response (PReP)

Why DEQ Uses Non-agency Data

- Force Multiplier - Help expand water quality monitoring coverage in the state
- Rapid Response - Early detection of pollution events to help alert DEQ
- Outreach - Work with local communities in a positive way

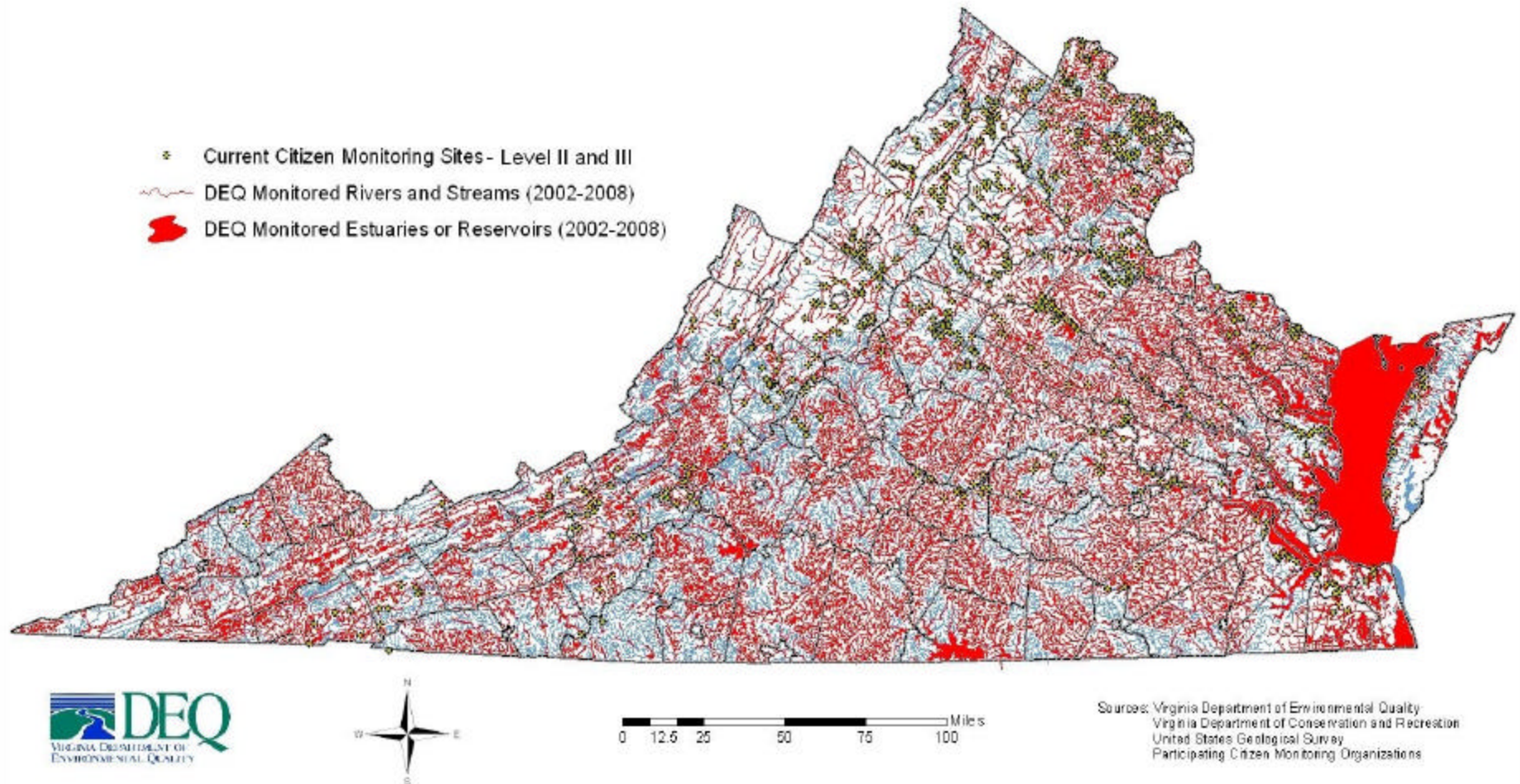
Two Different But Related Goals

- 3,000 Stream Miles Monitored by the Year 2010
 - HB 1859 (adopted in 2007)
 - Help to expand monitored area
 - Inclusive of but not limited to assessed areas
- 3,000 Stream Miles Assessed by the Year 2010
 - Budget measure for Citizen Monitoring Grants
 - Many federal and state programs have developed such “outputs”
 - Intended to ensure public funds are well spent

House Bill 1859 Goal

- Set a goal for DEQ to encourage citizen volunteer monitoring in 3,000 stream miles by the Year 2010
 - Level II and Level III data are eligible
 - Estimated 2,700 miles through 2006



Citizen Monitoring Opportunities In Virginia's Waters



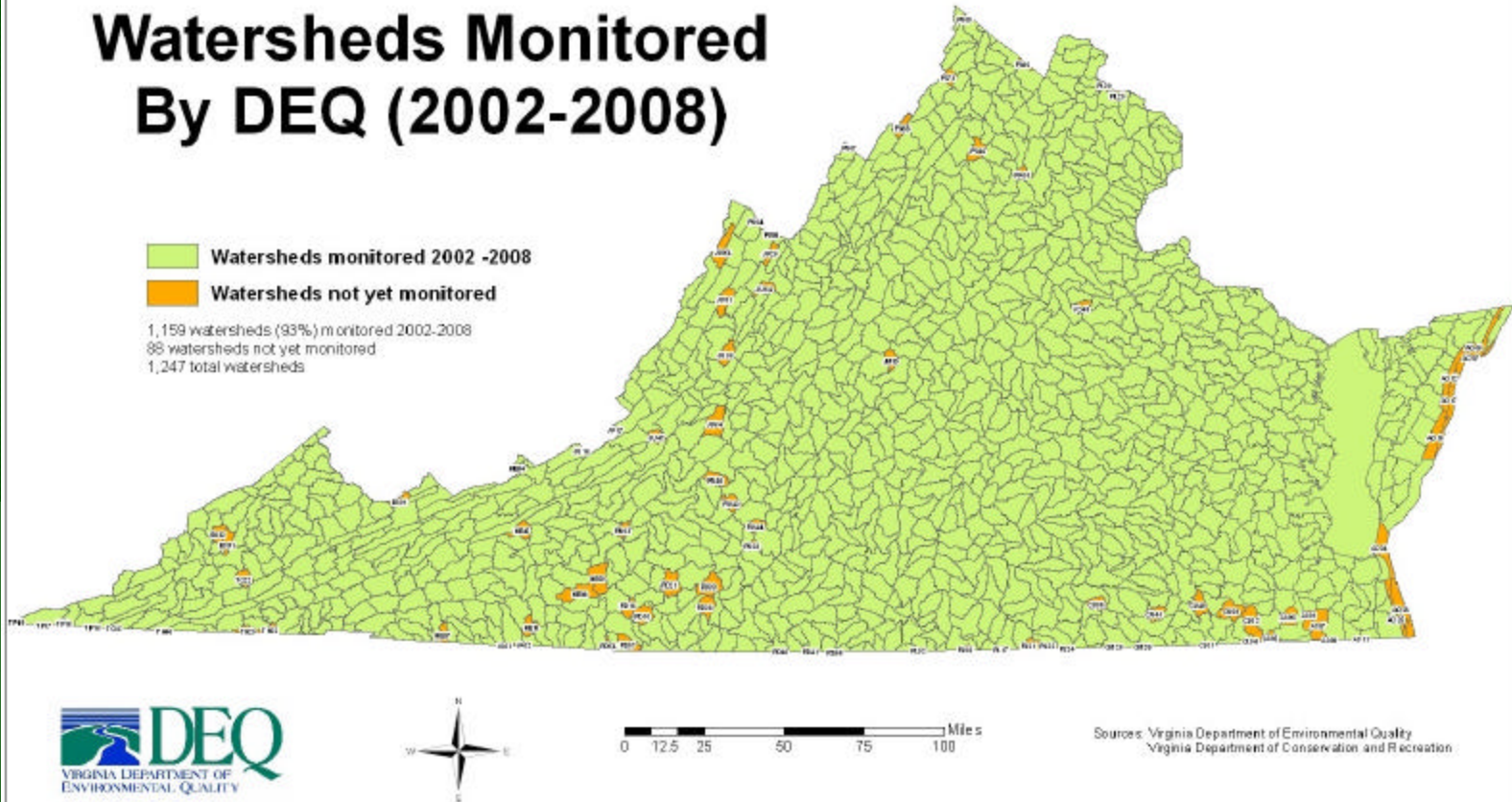
- Waterbodies where DEQ is not currently monitoring

Where Volunteers Could Help DEQ

Watersheds Monitored By DEQ (2002-2008)

-  Watersheds monitored 2002 -2008
-  Watersheds not yet monitored

1,159 watersheds (93%) monitored 2002-2008
88 watersheds not yet monitored
1,247 total watersheds



- The 14 major river basins make up 1247 subwatersheds
- There are 88 watersheds that DEQ cannot begin to monitor until at least 2009. That number was 162 after 2004.

Citizen Monitoring Grant Program

- Since 1998, DEQ has provided grant money to citizen volunteers
- Used to pay for monitoring costs and training
- On average, grants range from \$1,000 to \$5,000
- Water quality data is submitted to DEQ



Citizen Monitoring Budget Measure

- Measurable budget output for the DEQ Citizen Monitoring Grant Program
- Assess 3,000 Stream Miles in the 305(b)/303(d) Report using Citizen Volunteer Data by 2010
 - Only Level III Data is eligible for this goal
 - Estimated 1,300 miles through 2006

How DEQ Uses Volunteer Data

- **Stream Assessment** - 305(b) assessment of stream health and 303(d) impaired waters listing and delisting
- **TMDL Development** - Used with DEQ data to identify sources of pollution problems in TMDLs
- **TMDL Implementation** - Track water quality improvement during TMDL implementation
- **Help Us To Find Problems** - Detect pollution events and identify follow-up sites for DEQ monitoring
- **Education** - Educate the public on how land use activities impact water quality

Consequences of 303(d) Impaired Waters Listing

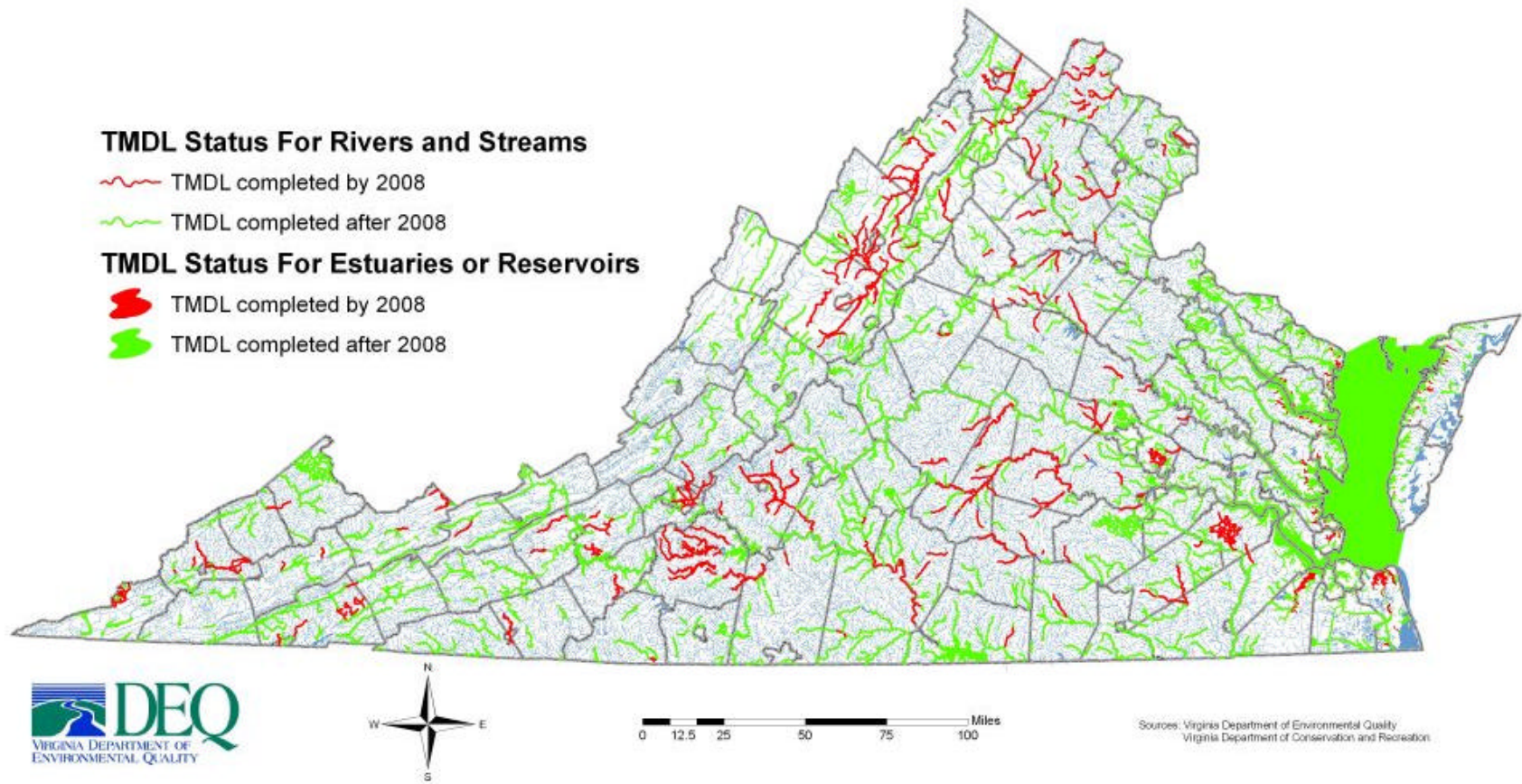
- Does not constitute a case decision by DEQ
- No basis for legal action
- Never been a lawsuit due to a listing
- When questioned evidence has been provided
- Benthic listings always supported by additional chemical data to determine the cause(s)
- Other states that are listing with citizen data include CA, DE, MN, NH, NV, OR, WA

Impact of a TMDL

- May result in waste load allocations (WLA) on point sources (stormwater and wastewater)
- TMDL is a regulatory action only if a WLA

TMDL Projects Could Benefit From Volunteer Monitoring

TMDL Completion Status In Virginia Waters



Data Use Survey

- In June 2007, DEQ started to survey the volunteer community on our 5 uses of data
- This survey will help DEQ respond to the needs of both the agency and volunteer groups
- A copy of the survey form is available at www.deq.virginia.gov/cmonitor/guidance.html

Data Use Survey Responses *

- List and Delist Waters 55%
- TMDL Development 75%
- TMDL Implementation 90%
- Follow-Up Monitoring 95%
- Education 100%

* Data from 20 responses received by July 21, 2007

For More Information

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